



IN REPLY REFER TO:

3100 (630)

# United States Department of the Interior

BUREAU OF LAND MANAGEMENT

WASHINGTON, D.C. 20240

June 10, 1983

- Instruction. Memorandum No. 83- 631  
Expires 9/30/84

To: All State Directors

From: Director

Subject: Underground Injection Control (UIC) Program, State of California

*1/23/85 meeting  
made suggestions that DOE formulate  
project applications to EPA for review and impact. BLM  
will still issue individual permits.  
DOE now seems to agree with  
this concept*

A memorandum from the Acting Minerals Manager, Western Region, dated April 8, 1983, forwarded a notice (copy enclosed) from the California Division of Oil and Gas. This notice was sent to all California oil and gas operators announcing that the Environmental Protection Agency (EPA) has granted the State primacy for Class II injection wells in California effective as of March 14, 1983. The Acting Manager requested that guidance be provided as to how best to minimize or avoid duplication with the State in matters relating to the approval of underground injection through Class II wells on Federal or Indian lands in California. The following discussion provides both background information and nationwide guidance on the subject.

The protection of subsurface fresh water resources beneath Federal and Indian lands against possible contamination as a result of approved operational activities traditionally has been within the jurisdiction of the Department of the Interior (DOI). We have carried out this responsibility effectively under lease terms and regulations for many years; however, the Safe Drinking Water Act (SDWA), P.L. 93-523 of December 14, 1974, as amended, required that EPA establish a national program to assure that subsurface waste injection would not endanger underground sources of drinking water. EPA proceeded to implement the mandated program by finalizing UIC regulations for Federal, Indian, State, and private lands under Title 40 CFR - Protection of Environment. Under its rules, EPA identified several categories of injection wells as being under its jurisdiction. Included among these categories is Class II injection wells, i.e., those wells utilized for (1) disposal of produced water, (2) production enhancement, and (3) underground storage of hydrocarbons which are liquid at standard temperature and pressure.

As a consequence of EPA's rulemaking, conflict quickly arose as to which agency should issue permits for Class II subsurface injection activities on lands under the jurisdiction of DOI. These jurisdictional problems were compounded further by the fact that the SDWA and EPA's implementing regulations authorize EPA to vest primacy in individual States. Several States now have achieved primacy, in part or in total, and others actively are pursuing that objective. The State of California is one of several States to make application to the EPA and, as the notice implies, it was granted authority to administer the UIC program for Class II wells in California on March 14, 1983.

A resolution of these jurisdictional conflicts was pursued extensively with EPA; however, little or no progress was made until recently. In November of 1982, EPA was advised by the Deputy Director, Minerals Management Service (MMS), that it supported State primacy and would eliminate duplicative requirements to the extent possible. As a result of that decision, there were two possible options which MMS could follow. One would have necessitated that MMS (1) adopt EPA's regulations or promulgate Class II regulations consistent therewith, (2) implement those regulations on Federal and Indian lands in non-primacy States, and (3) enter into cooperative agreements with each primacy State in order to establish the respective roles of MMS and the States in regard to underground injection through Class II wells on Federal and Indian lands. The second option available to MMS was to (1) defer to EPA or the primacy States in matters relating specifically to Class II underground injection control, (2) retain its involvement in the approval of wells drilled or converted for Class II injection purposes on Federal and Indian lands in order to carry out other mandated responsibilities, and (3) eliminate or reduce duplicative requirements imposed on lessees and operators who seek approval to drill or convert a jurisdictional well for Class II injection purposes. Clearly, Option 1 would have maximized DOI's control over the process on Federal and Indian lands. However, its implementation also would have been very labor intensive in the short term and, in the long term, would have necessitated that DOI dedicate a significant portion of its currently authorized onshore oil and gas inspection force to this effort. Since a reduction in the present inspection effort was considered unacceptable and it was felt that a request for additional funds and personnel for this purpose was not justifiable in this time of austere budgets, MMS chose to pursue Option 2. This option permits DOI to exercise control in the other mandated areas of concern without diminishing the present inspection program or necessitating a request for additional dollars or personnel. Shortly after the merger, the position taken by MMS was endorsed by the Bureau of Land Management (BLM). Thus, in considering its position on the total issue, BLM concluded that it would not accept responsibility for EPA's underground injection permitting program for Class II wells on Federal and Indian lands in non-primacy States.

EPA has been advised of BLM's decision and of the intent to defer to EPA or to those States that gain primacy in permitting underground injection in Class II wells. This means that EPA or a primacy State, insofar as protecting underground sources of drinking water against possible contamination by Class II injection on Federal and Indian lands, will make those determinations which relate to whether or not:

1. The proposed host formation constitutes an appropriate interval into which fluids may be injected;
2. The underground sources of drinking water in the area would be protected;

3. The proposed method of well completion provides a reasonable assurance that the injected fluids will not endanger underground sources of drinking water;
4. The integrity of an injection well is maintained over time; and
5. The integrity of any existing well in the area of influence will not constitute a channel for endangerment of drinking water sources now or in the future.

If this deliberative process leads to the conclusion that the proposed injection would not endanger underground fresh water sources in the area, the EPA or the State would then issue a permit for underground injection in the well(s).

In recognition of the authority of EPA (or a State) to issue permits for underground Class II injection wells on Federal and Indian lands, EPA has been advised that BLM will revise two outstanding Notices to Lessees and Operators and issue them as operating orders, i.e., NTL-2B which relates, in part, to the injection of fluids in the subsurface and NTL-6 which concerns the approval of operations, including drilling or conversion for injection purposes.

The process of revising NTL-6 and issuing it as Onshore Oil and Gas Operating Order No. 1 is well underway. It is anticipated that the final Order will be published in the Federal Register during July of 1983. The final Order has been revised to incorporate language pertinent to underground injection through wells on Federal and Indian lands. Specifically, lessees and operators are apprised that (1) an underground injection permit also must be obtained from EPA or the State whenever it is proposed to drill a new well for injection purposes or to convert an existing well for that purpose on Federal or Indian lands and (2) any information submitted to EPA or the State in support of obtaining the required permit will be accepted by BLM to the extent that it meets the information submittal requirements contained in Order No. 1. The process of revising NTL-2B and issuing it as an Order was initiated recently. While it is anticipated that the changes required there will not be as extensive as those made in NTL-6, the procedural steps to accomplish this are both numerous and time consuming. Our expectation at this point is that the final Order replacing NTL-2B will be issued in March of 1984. In the interim, it will be necessary to rely on Order No. 1, when issued final, and this memorandum for guidance on issues involving Class II underground injection pursuant to NTL-2B.

It is important to recognize that the UIC program, as implemented by EPA or a primacy State, is a much larger venue than just Federal and Indian lands. EPA and the primacy States will be much more extensively involved with permitting injection in wells on State and privately-owned lands. We

are not involved in this process. Conversely, the BLM program of approving the drilling and conversion of wells on Federal and Indian lands is much larger than the venue of underground injection. We anticipate that BLM will be permitting annually some 4,500 new wells or the conversion of existing wells for production rather than injection purposes. In those instances, BLM, rather than EPA or a primacy State, retains the responsibility for assuring that subsurface water sources are protected properly. It is estimated that we will meet on common ground with EPA or primacy States in less than 300 instances annually on a nationwide basis. Thus, it is not practical for EPA, the primacy States, or BLM to redesign their respective programs to track fully with one another.

As to those instances in which we meet on common ground, EPA has been advised that BLM cannot divorce itself completely from the drilling or conversion of a well for Class II injection purposes on Federal or Indian lands because of other mandates established by law, regulation, or lease terms that clearly remain in the purview of DOI. Some examples of these other DOI mandates, in both administrative and technical areas, are as follows:

1. Assure that the lease is still in effect and will remain so for the duration of operations.
2. Check lease expiration date to determine if the proposed operations will serve to extend the lease.
3. Assure that the proponent is authorized to conduct operations on the leasehold and that DOI mandated bond coverage is in effect and will continue for the duration needed.
4. Determine that the casing and cement programs are adequate to protect potential oil and gas productive zones, lost circulation zones, abnormally pressured zones, and intervals that contain other leasable mineral deposits.
5. Assure that the pressure control systems proposed for the well are adequate to meet the conditions expected to be encountered in the hole.
6. Determine that the proposed drilling mud program is adequate to contain expected pressures without causing formation breakdown and lost circulation, and that its chemical composition is controlled in contact with mineral-bearing formations.
7. Assure that safety and public health hazards are adequately addressed and plans for mitigation are submitted for approval (e.g., H<sub>2</sub>S contingency plan).
8. Determine that testing and completion programs proposed for the well conform to best available practices and procedures.

9. Assure that the operator is aware of the requirement to file a complete and correct well completion report and other related data such as electric logs, sample and core analyses, drillers and geologists logs, formation and pressure tests, directional surveys, and tests of potentially productive intervals.
10. Assure that specific surface environmental parameters are adequately addressed and that appropriate environmental documentation delineating the anticipated impacts and identifying appropriate mitigation methods is prepared prior to the decision to either approve, approve with modification, or reject.
11. Assure that the operator is aware of the requirement to file monthly reports of operations showing all wells on the lease, the status thereof, and the volume of oil, gas, and water produced, and if a service well, the volume of fluid injected.

We trust that the foregoing is fully responsive to the concerns expressed by the Acting Minerals Manager. However, should you have any additional questions or require further guidance, please contact the Division of Fluid Mineral Operations at 928-7865 or 928-7535 (FTS).



Assistant Director,  
Fluid Leasable Minerals  
Acting

2 Enclosures:

- Encl. 1 - Memorandum - Underground Injection in California, dated 4/8/83 (2 pp)
- Encl. 2 - Notice to Operators Regarding Underground Injection Control Program, received 3/11/83 (1 p)



United States Department of the  
BUREAU OF LAND MANAGEMENT

345 Middlefield Road  
Menlo Park, CA 94025

IN REPLY REFER TO:

MS-80

APR

Memorandum

To: Associate Director, Onshore Minerals Operati  
From: Acting Minerals Manager, Western Region  
Subject: Underground Injection in California

Attached is a notice sent by the California Division of (DOG) to all California Oil and Gas operators. We the DOG and, by copy of this memorandum, the BLM Cali office, that any meetings with respect to underground should be scheduled with the BLM State office when Branch is in place, possibly in July.

In the interim, please advise us if there has been or, as the merger, will be any progress in talks with the EPA a ters level. Our last check with Reston indicated that with EPA had been discontinued due to irreconcilable on several legal and jurisdictional issues.

Please provide us with some clear guidance on how to n avoid duplication with the State of California in regard ting underground injection.

*Bill R. LaVelle*

Bill R. LaVelle

Attachment

STATE OF CALIFORNIA—RESOURCES AGENCY

George Deukmejian,  
Governor

DEPARTMENT OF CONSERVATION  
DIVISION OF OIL AND GAS

9th STREET, ROOM 1310  
SACRAMENTO, CALIFORNIA 95814  
(916) 445-9686



March 9, 1983



Mr. B. R. Lavelle  
Deputy Minerals Manager  
Oil and Gas  
Bureau of Land Management  
345 Middlefield Road, MS 94  
Menlo Park, California 94025

Dear Mr. Lavelle:

Enclosed is a notice we sent to all California oil and gas operators, announcing our UIC primacy for Class II injection wells, which will become effective on March 14, 1983.

As we pointed out in a meeting with you several months ago, the Federal statute (Section 1421 of the Safe Drinking Water Act) gives the State regulatory authority over Class II injection wells on Federal as well as State and private lands in California.

To avoid any unnecessary duplication of regulatory effort, we would like to meet with you to discuss this program at your earliest convenience.

Sincerely,

*Simon Cordova*

Simon Cordova  
Acting Chief  
Division of Oil and Gas

SC:iw

Enclosure

cc: M. G. Mefferd

*Marty Mefferd*

STATE OF CALIFORNIA—RESOURCES AGENCY

DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

1400 P STREET, ROOM 1300 1310

SAN FRANCISCO, CALIFORNIA 94114

415-9686

MAR 11 1983

DM, Oil & Gas  
Western Region  
Hedden Park, CA

George Deukmejian,

Governor

NOTICE TO OPERATORS  
REGARDING  
UNDERGROUND INJECTION CONTROL PROGRAM  
(Enhanced Recovery and Disposal Projects)

Under the provisions of Section 1425 of the federal Safe Drinking Water Act, the Environmental Protection Agency (EPA) has approved the Division of Oil and Gas' (CDOG) application to regulate injection wells that are used in relation to oil- and gas-producing operations (Class II wells). By this approval, the EPA has granted authority beginning March 14, 1983 to the CDOG to administer an Underground Injection Control (UIC) program for the purpose of preventing any injection that endangers an underground source of drinking water (USDW).

Although the injection control program that the CDOG has administered in the past will still apply in most respects, there are changes that operators should be particularly aware of when making application for new projects or modifying existing projects. Under the new program, the CDOG is responsible for the issuance of project and injection well permits, monitoring injection performance, and enforcing any actions that may be necessary to ensure that drinking water sources are protected. Implementation of this new UIC program will require that the CDOG consult with the Regional Water Quality Control Boards regarding permit requirements for each project and with the EPA regarding project compliance and enforcement.

Further, injection can only occur into hydrocarbon-bearing zones or into aquifers, or portions thereof, that contain a total dissolved solids (TDS) content that exceeds 10,000 parts per million. To inject into aquifers of less than 10,000 ppm requires a special exemption from the EPA. Also, as a general rule, more time will be required for an operator to obtain a project permit than in the past, because provisions of the UIC program require that the CDOG provide for public review and comment. There may also be the need to schedule public hearings if substantive concerns are expressed during the public comment period.

When the EPA approved the State program, the approval also included exemptions for most of the nonhydrocarbon-producing aquifers that are currently being used for waste disposal purposes. However, there are still a few aquifers that have not been exempted because pertinent data to support an exemption are either not available or the aquifer does not qualify for continued injection. Operators that are injecting into aquifers that have not been exempted will be notified.

For any additional information related to the implementation of this program or aquifer exemptions, please contact any of the CDOG offices.

Simon Cordova